

Plastic Fabrication

For extruder or hot air welding,
LEISTER has the answer for all welding problems.

Thanks to continuous electronic temperature control, **all thermoplastics** including PVC-P, PVC-U, PE-HD, PE-LD, PP, PPS, PC, PMMA, PS, ABS, PVDF and FEP can be welded, bent and formed with LEISTER tools.

Mini-Handextruder

WELDMAX


The advanced extruder system



Weldmax Mini-Handextruder being used to weld PP

- Compact hand extruder with integrated hot air blower, plasticizer unit, electronic control and feeder for welding rod in one housing
- Separate continuous temperature controls for plasticiser unit and preheated air
- Light weight – only 3.8 kg, but still efficient
- No additional booster sets like compressors, control boxes etc. necessary
- Universal extruder for PE-HD, PP and PPS without change-over
- Continuous and stepless feeding of welding rod
- High efficiency no, multiple welding rods
- Application and quality requirements in accordance with the DVS (German Welding Association)
- PFTE welding shoes and blanks for all seam configurations

Technical Data

Type	WELDMAX	
Voltage	V~	120, 200, 230
Power consumption	W	1800, 2200, 2200
Frequency	Hz	50/60
Air-Temperature	°C	max. 400, steplessly controlled
Air flow	l/min	300
Plasticizer-Temperature	°C	270, steplessly controlled
Output	kg/h	0.7
Welding rod	mm	ø 4 ± 0.2 (according to DVS 2211)
Size	mm	443 × 94 × 255, handle ø 57
Weight	kg	3.8
Approval mark:		CCA certified



LEISTER®

Hand-welding tools

- Effortless welding thanks to light weight and smaller diameter
- Reproducible welding results thanks to digital temperature display of SET and ACTUAL value
- Adaptor tube with heat protection
- Stepless electronic temperature control, therefore independent of voltage fluctuations and varying ambient temperature (PID control)
- Electronic heating element protection and automatic shut-off of the motor at minimal carbon level
- Multiple replace of carbon brushes possible, therefore suitable for continuous operation

TRIAC PID

The welding tool for quality assurance



CE


TRIAC S

The reliable hand-tool




CE

Technical Data

Type	TRIAC PID	
Voltage	V~	42, 100, 120, 200, 230
Power consumption	W	1000, 1400, 1600, 1400, 1600
Frequency	Hz	50/60
Temperature	°C	50 – 600, steplessly controlled
Air flow	l/min	max. 230
Pressure stat.	Pa	ca. 3000 (30 mbar), after 24 h operating time
Emission level	L _{pA} (dB)	65
Size	mm	340 × 90, handle ø 56
Weight	kg	1.4 with 3 m cord
Approval mark:		CCA certified

Technical Data

Type	TRIAC S	
Voltage	V~	42, 100, 120, 200, 230
Power consumption	W	1000, 1400, 1600, 1400, 1600
Frequency	Hz	50/60
Temperature	°C	20 – 700, steplessly adjustable
Air flow	l/min.	max. 230
Pressure stat.	Pa	ca. 3000 (30 mbar), after 24 h operating time
Emission level	L _{pA} (dB)	65
Size	mm	340 × 90, handle ø 56
Weight	kg	1.3 with 3 m cord
Approval mark:		CCA certified



TRIAC PID hand-welding tool with screw-on draw nozzle being used to weld a PVC-U cover.



Welding of a PE-HD drum.
TRIAC-S – the standard tool with high welding speed.

HOT JET S □

The lightest compact welding tool



WELDING PEN

The new tool generation



Technical Data

Type	HOT JET S	
Voltage	V~	100, 120, 230
Power consumption	W	460, 460, 460
Frequency	Hz	50/60
Temperature	°C	20 – 600, steplessly controlled
Air flow	l/min.	20 – 80, steplessly adjustable
Pressure stat.	Pa	max. 1600 (16 mbar)
Emission level	L _{PA} (dB)	59
Size	mm	235 × 70, handle ø 40
Weight	g	580 with 3 m cord
Approval mark:		CCA certified



HOT-JET S being used for PE-HD tacking.

Technical Data

Type	WELDING PEN R		WELDING PEN S	
Voltage	V~	100, 120, 230	100, 120, 230	
Power consumption	W	450, 600, 1000	450, 600, 1000	
Frequency	Hz	50 / 60	50 / 60	
Temperature	°C	20 - 600 steplessly controlled	20 - 600 steplessly adjustable	
Air flow	l/min.	>80	>80	
Pressure (dynamic)	Pa	max. 10 ⁵	max. 10 ⁵	
Size	mm	ø 32/43 × 270	ø 32/43 × 270	
Weight	g	1000 with 3 m cable, air hose and y-connection	1000 with 3 m cable, air hose and y-connection	
Display		Yes	No	
Heating element protection*		Yes	Yes	
Adaptor tube with heat protection		Yes	Yes	

*Patent pending

Version without electronic but with heating element protection available. Ask for technical data.



Welding PEN R with digital display for SET and ACTUAL value. The powerful welding tool.

DIODE PID 

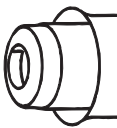
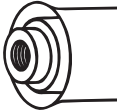
For highest quality standards

DIODE S 

Unbeatable in performance and handling




DIODE PID	DIODE S
<ul style="list-style-type: none"> • Digital temperature display • Electronically controlled temperature • Electronic heating element protection • Adaptor tube with heat protection 	<ul style="list-style-type: none"> • Electronically adjustable temperature • Heating element protection by means of photocell • Adaptor tube with heat protection

Type	Version	
DIODE PID DIODE S		Conical adaptor tube with heat protection for push-fit LEISTER nozzles for round and profile welding rods.
DIODE PID DIODE S		Conical adaptor tube with heat protection for screw-on LEISTER draw nozzles for round and profile welding rods.

Air supply provided by appropriate LEISTER blowers MINOR and ROBUST (see page 5)

Technical Data

Type	DIODE PID	DIODE S
Voltage	V~	42, 100, 120, 230
Power consumption	W	900, 1400, 1600, 1600
Frequency	Hz	50/60
Temperature	°C	20 – 600, steplessly controlled (Diode PID) steplessly adjustable (Diode S)
Air flow	l/min.	min. 40
Air pressure	Pa	max. 10 ⁵ (1000 mbar)
Size	mm	265 × 57, handle ø 40
Weight	g	425, 1150, with 3 m cord and 3 m air hose
Approval mark:		CCA certified



DIODE PID hot air tool with display and electronic control.

High pressure blower

ROBUST

MINOR

Technical Data

Air supply for three DIODE PID, three DIODE S or three Welding PEN

Type	ROBUST	
Voltage	V~	3 × 230 – 254, 3 × 380 – 440
	V~	1 × 230 – 254 single phase with condensator
Power consumption	W	250
Frequency	Hz	50/60
Air flow	l/min.	1200/50 Hz, 1300/60 Hz
Pressure stat.	Pa	8000 (80 mbar) / 50 Hz 10500 (105 mbar) / 60 Hz
Emission level	L _{pA} (dB)	62
Size L × W × H	mm	255 × 221 × 221
Weight	kg	8.0

Technical Data

Air supply for max. one DIODE PID or one DIODE S.

Type	MINOR	
Voltage	V~	42, 120, 230
Power consumption	W	100, 100, 100
Frequency	Hz	50/60
Air flow	l/min.	400
Pressure stat.	Pa	4000, (40 mbar), 50/60 Hz
Emission level	L _{pA} (dB)	67
Size	mm	250 × 95, handle ø 64
Weight	kg	1.15 with cord

Approval mark:

Welding PEN S the smallest and handy welding tool.
Air supply from the high pressure blower ROBUST.

DIODE S with adaptor tube with heat protection.
Air supply from MINOR blower.

Hot air blower

ELECTRON

Powerful but still small



CE

Technical Data

Type	ELECTRON	
Voltage	V~	42, 120, 200, 230
Power consumption	W	1000, 2700, 3000, 2300/3400
Frequency	Hz	50/60
Temperature	°C	20 – 650, steplessly controlled
Air flow	l/min.	max. 500, manual air slide
Pressure stat.	Pa	3000 (30 mbar)
Emission level	L _{PA} (dB)	65
Size	mm	320 × 95, handle ø 64
Weight	kg	1.5 with 3 m cord

Approval mark:



Tensiometer

EXAMO

For shearing, peeling and tensile tests



CE

Technical Data

Type		EXAMO 300 F	EXAMO 600F
Voltage	V~	120, 230	120, 230
Power consumption	W	200	200
Max. tensile load	N	4000	3000
Load measure range	N	0 – 4000	0 – 3000
Min. jaw spacing	mm	30	30
Max. jaw spacing	mm	300	600
Max. Range	mm	300	600
Testing speed	mm/min.	10 – 300	10 – 300
Max. sample thickness	mm	7	7
Max. sample width	mm	40 (50 optional)	40 (50 optional)
Memory-Card		optional	optional
Dimension of Storage case L×W×H	mm	750 × 270 × 190	1050 × 270 × 190
Weight	kg	14	17.5

Digital display

- Max. tensile load, F_{Peak}
- Elongation % at F_{Peak}
- Tearing force, F_{Tear}
- Elongation % at F_{Tear}
- Test speed
- Position

Approval mark:



- Handy, robust and light
- Digital display of process values

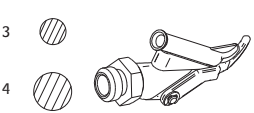
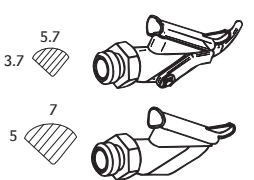

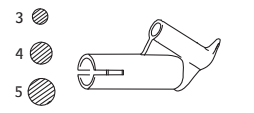
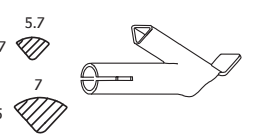
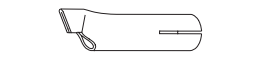




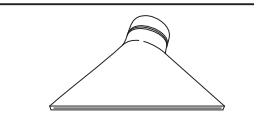
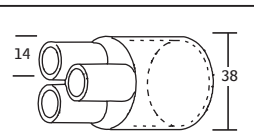
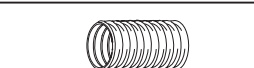
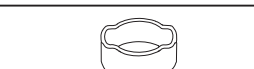
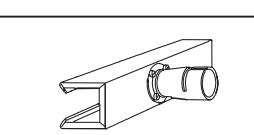


Heating, bending and forming with ELECTRON and hinged reflector.



Simple and fast clamping system for all samples.

Accessories for plastic fabrication

Order Number	Illustration not to scale	
113.666 113.399		High speed draw nozzle \varnothing 3mm with tacking tip. Screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S (without tacking tip on request) High speed draw nozzle \varnothing 4mm with tacking tip. Screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S (without tacking tip on request)
113.670 106.986		High speed draw nozzle 90-5.7mm with tacking tip. Screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S (without tacking tip on request) Draw nozzle 7mm screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S
106.988		Tacking nozzle screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S
106.989 106.990 106.991		Speed welding nozzle 3mm push-fit on tubular nozzle \varnothing 5mm Speed welding nozzle 4mm push-fit on tubular nozzle \varnothing 5mm Speed welding nozzle 5mm push-fit on tubular nozzle \varnothing 5mm
106.992 106.993		Speed welding nozzle 5.7mm push-fit on tubular nozzle \varnothing 5mm Speed welding nozzle 7mm push-fit on tubular nozzle \varnothing 5mm
106.996		Tacking nozzle push-fit on tubular nozzle \varnothing 5mm
107.144		Tubular nozzle \varnothing 5mm push-fit on Hot Jet S
100.303		Tubular nozzle \varnothing 5mm push-fit on Triac PID/Triac S and Diode PID/Diode S
105.622		Tubular nozzle \varnothing 5mm screw on Triac PID/Triac S, Diode PID/Diode S and Welding PEN R/Welding PEN S
107.258		Wide slot nozzle 70 x 10mm push-fit on Electron
107.270		Wide slot nozzle 150 x 12mm push-fit on Electron
107.281		Hose coupling (\varnothing 38mm), 3 outlets for Robust
101.681		Air hose \varnothing 14mm for Diode PID/Diode S and Welding PEN R/Welding PEN S
101.031		Hose clamp for air hose \varnothing 14mm
107.326		Shell reflector 25 x 150mm push-fit on Triac PID/Triac S and Diode PID/Diode S

Order Number	Illustration not to scale	
107.331		Folding reflector 72 x 70mm push-fit on Electron
107.340		Shell reflector 45 x 250mm push-fit on Electron
107.344		Welding mirror 135mm push-fit on Triac PID/Triac S and Diode PID/Diode S
107.346		Welding mirror 270mm push-fit on Electron
107.347		Swordshaped nozzle 74 x 12 x 520mm, PTFE covered push-fit on Electron
107.354		Stainless steel filter (Robust)
	Profil A	Endless profiled welding rod 5.7 x 3.7mm, 7 x 5mm, in PVC-U (grey), PVC-P (transparent), PE-HD (black), PE-LD (black), PP (beige), ABS (white).
	Profil B	
	Profil A	Endless profiled welding rod 5.7 x 3.7mm in PC (transparent), PA (black), POM (natur)
	Profil A	Endless profiled welding rod 5.7 x 3.7mm PVDF
107.037		Test bundle profiled welding rod 5.7mm
108.623		Capacitor 12uF/240V complete (Robust 230V)
112.628		Welding shoe complete, for fillet weld 10 mm Weldmax
112.627		Welding shoe complete, for fillet weld 8 mm Weldmax
112.625		Welding shoe complete, for fillet weld 6 mm Weldmax
112.630		Welding shoe complete, for fillet weld 5 mm Weldmax
112.624		Welding shoe complete, for V-seam 10 mm Weldmax
112.623		Welding shoe complete, for V-seam 8 mm Weldmax
112.621		Welding shoe complete, for V-seam 6 mm Weldmax
112.629		Welding shoe complete, for V-seam 5 mm Weldmax
112.830		Welding shoe blank complete Weldmax
112.852		

Technical data are subject to change without notice.

Nozzles are not included to the hand tools.



LEISTER Process Technologies
Riedstrasse
CH-6060 Sarnen / Switzerland

Tel. + 41 41 662 74 74
Fax + 41 41 662 74 16
www.leister.com e-mail leister@leister.com

ISO 9001:2000